TOEGEPASTE GEOLOGIE EN HYDROGEOLOGIE

ECONOMISCHE PRE-EVALUATIE VAN MINERALISATIES IN BOORKERNEN VAN HET MASSIEF VAN BRABANT

Bijlage 3

UNIVERSITEIT GENT

UNIVERSITEIT GENT

Laboratorium
voor
Toegepaste Geologie
en
Hydrogeologie

ECONOMISCHE PRE-EVALUATIE VAN MINERALISATIES IN BOORKERNEN VAN HET MASSIEF VAN BRABANT

Bijlage 3

Geologisch Instituut
Krijgslaan 281, S8
B-9000 Gent

tel. 09/264 46 47
fax 09/264 49 88

Opdrachtgever

Ministerie van de
Vlaamse Gemeenschap

Leiding : Prof. Dr. W. DE BREUCK
Studie en verslag :
Lic. G. FRANCESCHI

Projectnummer : TGO 98/23
Datum : januari 1999

Bijlage 3

Geselecteerde foto's van de kernen van boringen B4, B5, B6

Fotos genomen en van commentaar voorzien
door GF Consult bvba. en geassocïeerde staf

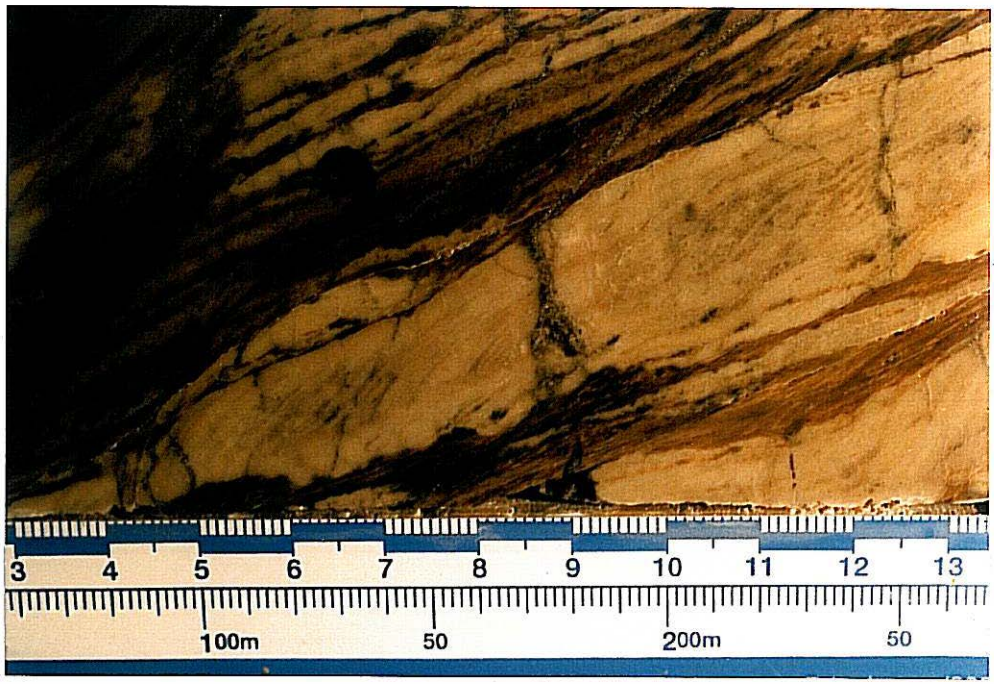
Photographs 1-4 :

Illustrating original sedimentary Stuctures and weak deformation.

Photograph 1: Interbedded quartzite and metapelite, quartzites are probably traction current deposits from a quartz rich source, metapelites represent pelagic deposition. Some development of spaced S1 along kink bands. Drill Hole B4, 43.3-43.5m.

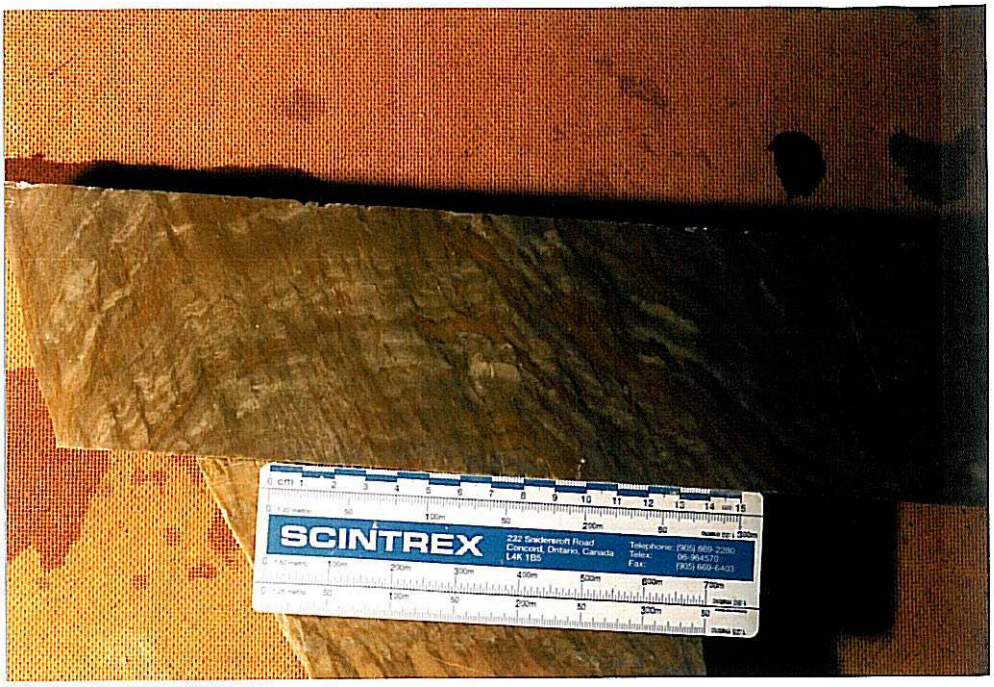
Photograph 2: Interbedded quartzite and metapelite, quartzite beds squeezed out during deformation or possibly during early soft sediment slumping, development of spaced S1 related to small scale folding. Drill Hole B4, 52.7-53.0m.

Photograph 3: Interbedded quartzite and metapelite, quartzites irregularly folded and squeezed out during deformation with some brittle fracturing. Drill Hole B4 21.3-21.5m.



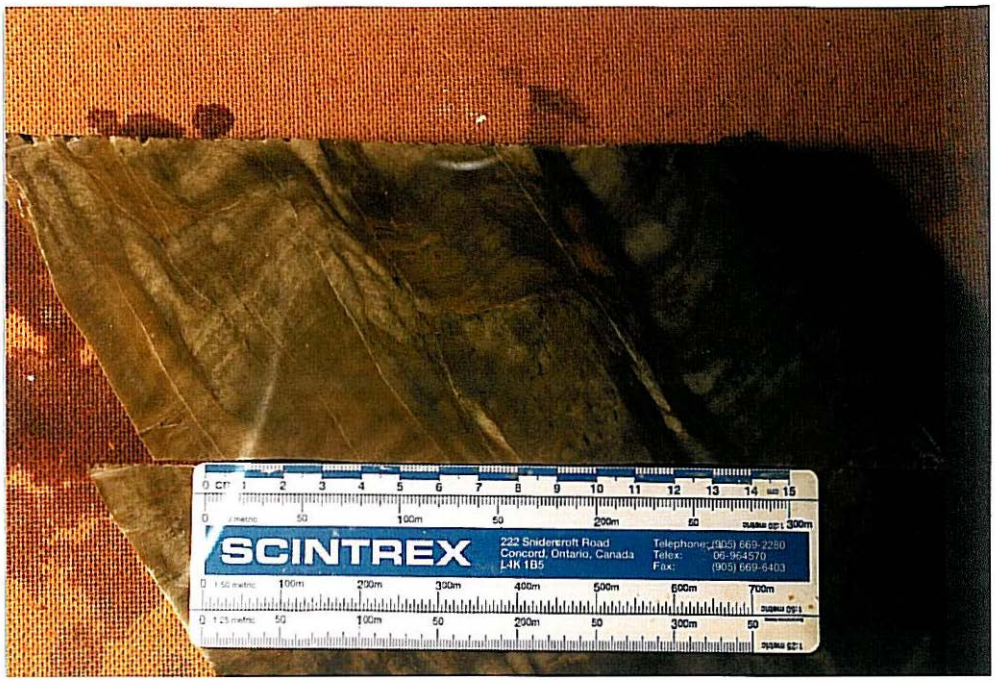
Photograph 4: Cross bedding in quartzite bed. Drill Hole B4 22.0-2.2m.

Photographs 5-10 :
Illustrating increasing movement along S1 resulting in transposition of S1.



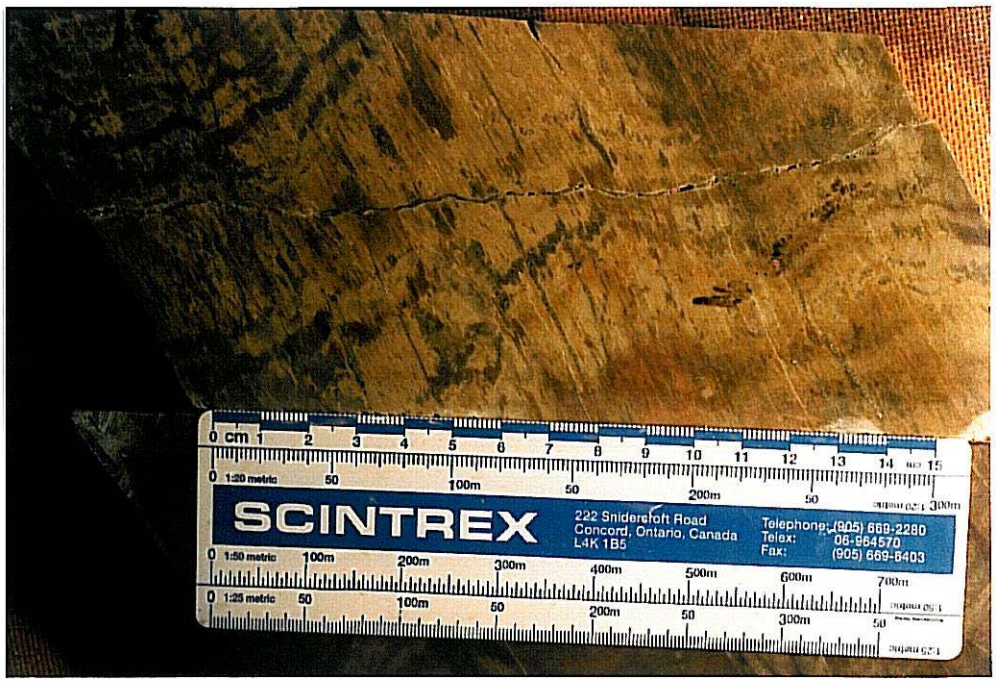
Photograph 5: Broad open folding typical of most of the drill core, with the development of a spaced axial plane schistosity. Pervasive "browning" of metapelite due to late ?sericitic alteration unrelated to cleavage and deformation. Drill Hole B6, 142.1-142.4m.

Photograph 6: Folded sediment with the development of faults due to movement along spaced S1. Drill Hole B4, 32.8-33.0m.



Photograph 7: Quartzite rich sediment with faulting along spaced S1.
Drill Hole B6, 155.6-155.7m.

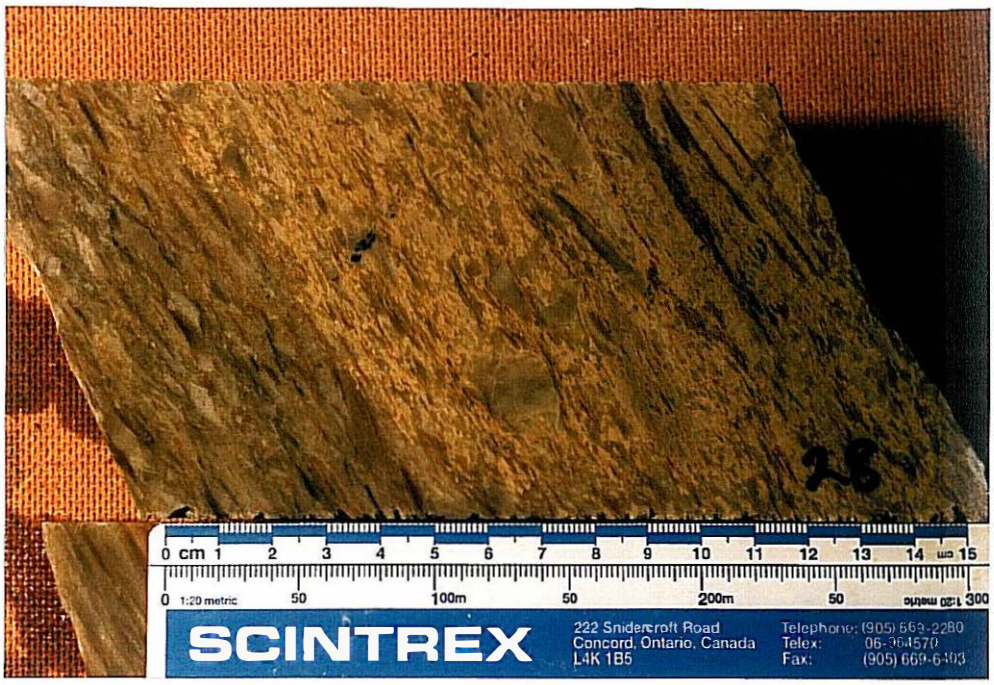
Photograph 8: Folded sediment with zones of strong close spaced S1 development.
Drill Hole B3, 61.3-61.6m.



Photograph 9: Folded sediment, closely spaced S1, but only minor displacement of S0. Pervasive "browning" of pelitic units due to late ?sericitic alteration unrelated to cleavage and deformation. Drill Hole B6, 159.8-160.1m.

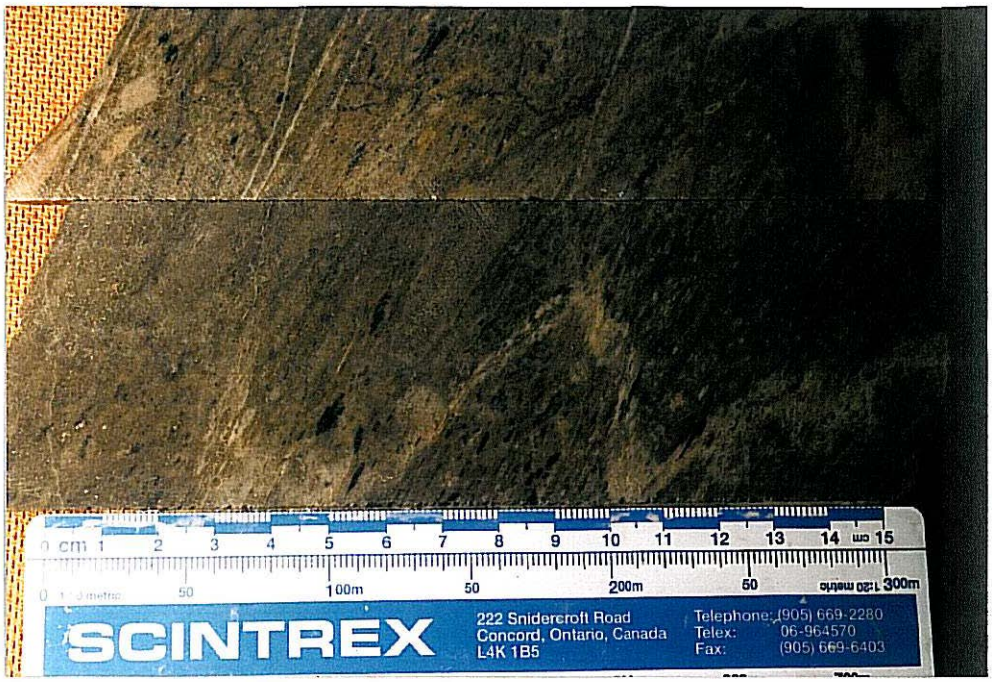
Photograph 10: More intense faulting along spaced S1 resulting in breaking up of S0. Drill Hole B4, 27.0-27.3m.

Photographs 11-16: Acid Volcanics?.



Photograph 11: Agglomerate. Drill Hole B6, 145.4-145.6m.

Photograph 12: More intense dislocation but vestiges of folded pelite-quartzite can still be seen. Drill Hole B4, 61.3-61.6m.



Photograph 13: Agglomerate-tuff, vestiges of pelites are dark grey, and quartzites white sand sized clasts. Foliation parallels original S1, Late alteration veinlet appears to be folded. Mixing of clasts may indicate considerable fluid movement along this unit. Drill Hole B5, ~78-80m.

Photograph 14: Tuff, in faulted contact with altered sediment. Drill Hole B5, ~78-80m.

Photograph 15: Tuff? containing clasts of volcanics, quartzite, metapelite aligned along S1. Drill Hole B6, 102.2-102.2m.

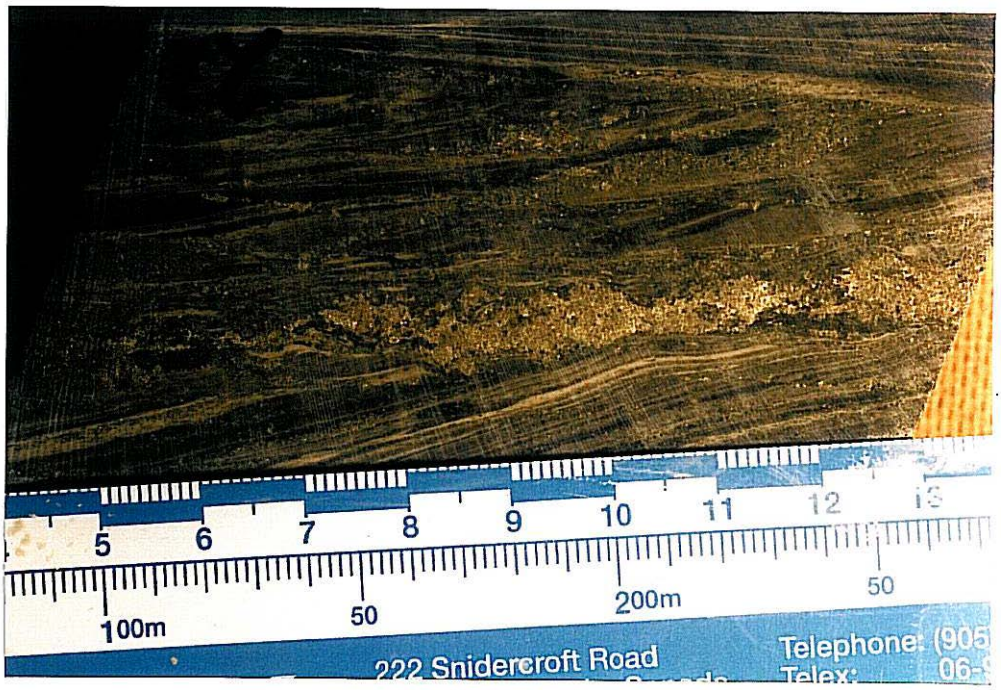
Photograph 16: Tuff? containing clasts of deformed turbidite and volcanics. Drill Hole B6, 103.0-103.2m.

Photographs 17-21 :
Illustrating styles of sulphide mineralisation.

Photograph 17: Pyrite-chalcopyrite vein developed along a spaced S1 zone. S1 appears to be a zone of fluidisation and breccia development. In this case mineralisation appears to postdate the pervasive ?sericite alteration event. Drill Hole B6, 107.0-107.1m.

Photograph 18: Minor pyrite and quartz veining associated with a spaced S1 zone, in which breccias associated with fluidisation have developed. Drill Hole B4, 51.09-51.3m.

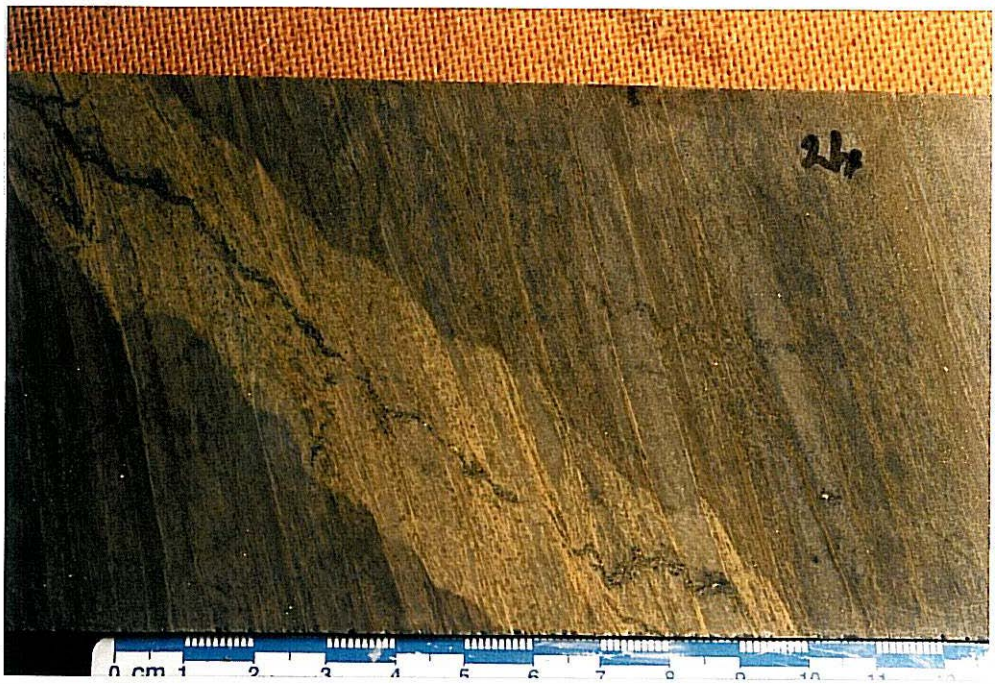
Photograph 19: Pyrite veinlets replacing S0 around a fold and along S1. Drill Hole B6, 81.0-81.2m.



Photograph 20: Irregular pyrite-chalcopyrite replacement of S0. Drill Hole B6, 104.9-105.0m.

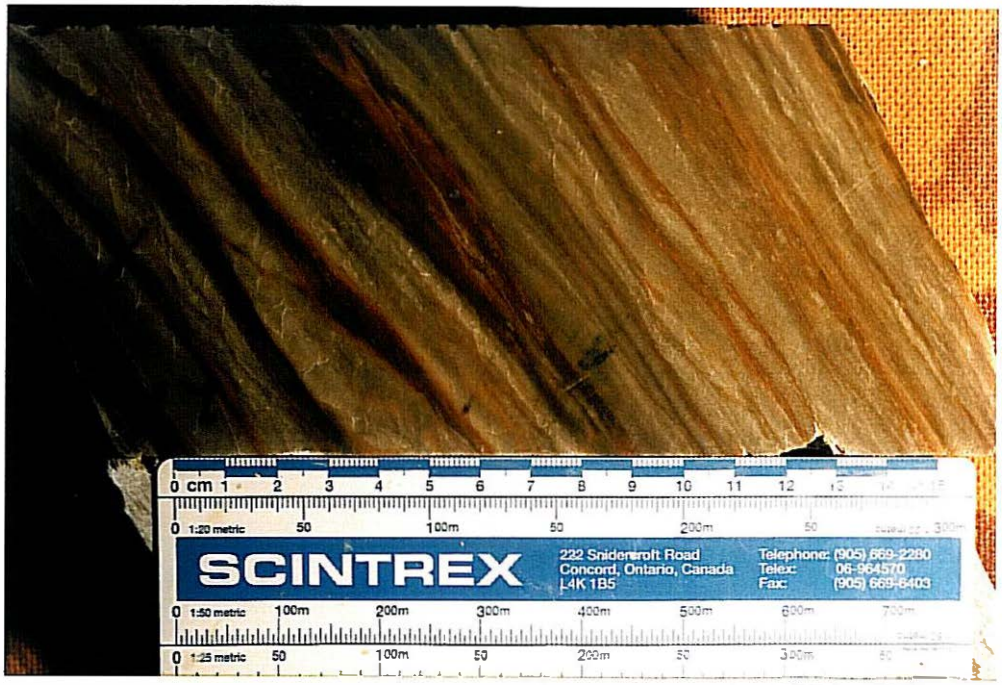
Photographs 21-24 :
Illustrating degrees of ?sericite "browning".

Photograph 21: Alteration front between grey (chloritic ?) and yellow sericite altered rock. The front cuts across S1 and therefore postdates it. Drill Hole B6, 115.6-115.9m.



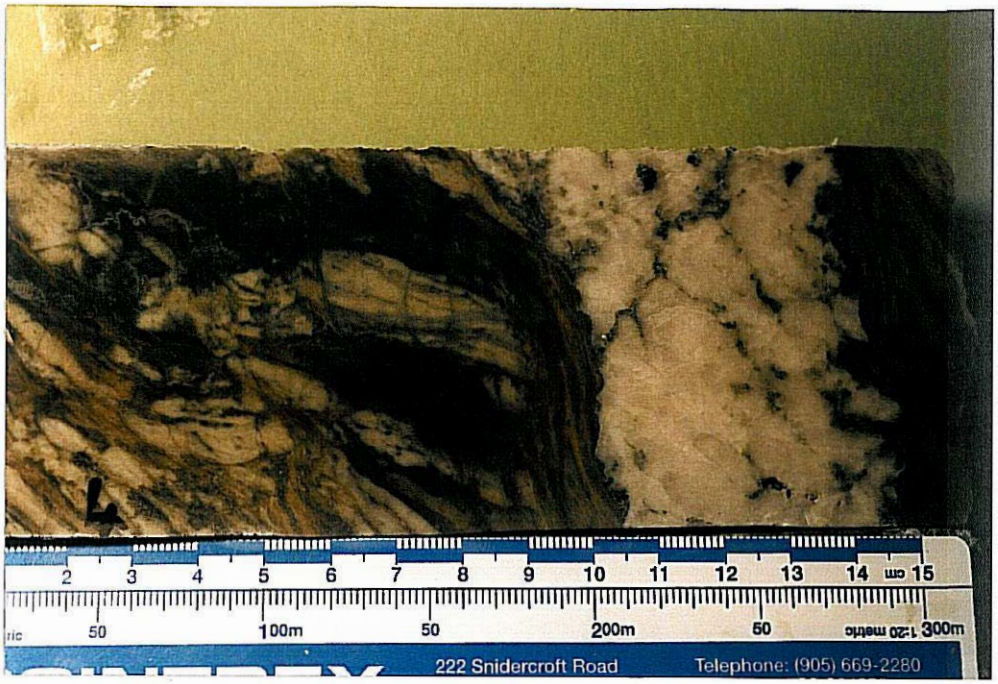
Photograph 22: Alteration front between grey (chloritic?) and yellow ?sericite altered rock. In this case the sericite alteration is a halo around a pyrite veinlet.
Drill Hole B6, 115.6-115.9m.

Photograph 23: Light brown pervasive ?sericite alteration of pelites. Quartzitic parts remain unaltered. Drill Hole B6, 133.3-133.4m.



Photograph 24: Extreme "browning" of pelitic parts of a quartzite rich turbidite due to pervasive sericite alteration. Drill Hole B6, 144.1-144.3m.

Photographs 25-26 :
Illustrating late stage unmineralised quartz veins.



Photograph 25: Quartz vein with abundant ?muscovite filling brittle fractures in the vein and its margins. Some ductile movement near the vein margin. No alteration is associated with the quartz vein. Drill Hole B4, 20.8-21.0m.

Photograph 26: irregular quartz veins with muscovite filling britle fractures. Surrounding rock is pervasively sericite altered, but there is no alteration associated with the vein. Drill Hole B4, 20.0-20.3m.